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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,524	09/28/2004	Tuomo Kivisto	6009-4714	7838

7590 05/31/2007  
Israel Blum  
Morgan & Finnegan,  
3 World Financial Center  
New York, NY 10281-2101

EXAMINER
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BELL, BRUCE F

ART UNIT	PAPER NUMBER
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1746

MAIL DATE	DELIVERY MODE
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05/31/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/509,524

Applicant(s)

KIVISTO ET AL.

Examiner

Bruce F. Bell

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 9/28/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

#### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Applicant is requested to insert the above Titles prior to each section of their specification.

1. The disclosure is objected to because of the following informalities:

Page 1, lines 3-7; Reference to claim 1 is not permitted, since claims are subject to change during prosecution of the application. Applicant is requested to remove the

reference to this claim and insert those portions of claim 1 into the specification which they deem necessary.

Page 2, line 2; Change "nothcing" to "notching".

Page 3, lines 17-19; Reference to claim 1 is not permitted, since claims are subject to change during prosecution of the application. Applicant is requested to remove the reference to this claim and insert those portions of claim 1 into the specification which they deem necessary.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

2. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-11 are vague and indefinite with respect to what the structure of the transfer and insulation device is. It is unclear to the examiner what parts of the device set forth in the instant figures and specification make up the transfer and insulation device and further how it can be one piece construction if a locking pin is required to hold the mechanism together, what ever the parts of the mechanism are. It appears that this device is inclusive of the grip lug, suspension rod and distribution element, but the examiner can not tell from the disclosure if this is correct or not.

Correction and/or clarification are requested.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 4, 6-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Virtanen et al (6,342,136).

Virtanen et al disclose an electrolytic cell busbar construction which construction forms gaps between the electrodes and provides an integral profile longitudinally to the cell and the support lugs of the electrodes in the cell are unnotched. See abstract. The support elements are electrically insulated from the main busbar and are electrically conductive material so that they balance the potential between the electrodes of the same sign in the cell. The main busbar, support elements and insulating materials are all integral longitudinally to the cell, with constant cross sections through out their entire lengths. See col. 2, lines 30-36. The support element is a potential balancing bar separated from the main busbar by insulting material. The balancing bar is at the same level as the upper bulge of the main busbar and forms an electrical connection between the support lugs of the upper electrodes which are not on a main busbar. See col. 2, lines 59-67. Both anodes and cathodes are supported by support lugs to the busbar construction. See col. 3, lines 54-55.

Virtanen et al anticipates the applicants instant invention as set forth above with respect to the instant claims as presented. The prior art of Virtanen et al sets forth a

Art Unit: 1746

transfer and insulation device that is made of a single material. The patent further discloses a gripping lug/suspension rod as shown in figure 2 as feature 4. Even though the patent discloses this as being a part of the cathode, rather than the anode, it has not been given any weight, since structurally, the cathode and anodes are just electrode plates until such time as they are connected electrically which electrical connections do not materially change the structure per se. The suspension rod and gripper hook are fastened in some manner as seen in Figure 2 and it appears that the gripper mechanism surrounds the suspension rod and does not fully cover the suspension rod. The gripper faces toward the middle part of the electrode and the far part of the gripper has a small inclined part from the end to the middle as seen in figure 2. A distribution element for insulating adjacent electrodes is set forth on the cell side wall with an insulating plate and main busbar. Therefore, the prior art of Virtanen et al anticipates the applicants instant invention as set forth above with respect to the instant claims.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Virtanen et al (6342136) in combination with Dailey et al (5534048).

Virtanen et al is as disclosed above in the 35 USC 102(b) rejection above.

Virtanen et al does not disclose that the transfer and insulation device is made of a chemically resistant and insulating material.

Dailey et al disclose that is electrolytic systems in order to avoid safety hazards with current flows, that that coatings be applied to metallic structures to allow proper handling of the electrolytic parts. See col. 1, lines 29-39.

The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the instant invention was made because even though the prior art of Virtanen et al does not disclose that the transfer and insulation device is chemically resistant and insulating, the prior art of Dailey et al sets forth that it is known to coat such materials on electrically conductive parts for the purpose of eliminating safety concerns. Therefore, the prior art of Virtanen et al in combination with Dailey et al render the applicants instant invention obvious for the reasons set forth above.

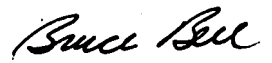
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruce F. Bell whose telephone number is 571-272-1296. The examiner can normally be reached on Monday-Friday 6:30 AM - 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on 571 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1746

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BFB  
May 23, 2007

  
Bruce F. Bell  
Primary Examiner  
Art Unit 1746